

## Type Approval Certificate

*This is to certify that the undernoted product has been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.*

This certificate is issued to:

<b>PRODUCER</b>	RYCO Hydraulics
<b>PLACE OF PRODUCTION</b>	RYCO Hydraulics Pty. Ltd. 19 Whitehall Street, Footscray, Victoria 3011 Australia RYCO Hydraulics Sdn. Bhd. Plot 207, Kuala Ketil Industrial Estate, 09300 Kuala Ketil, Kedah Darulaman, Malaysia RYCO Hydraulics (Dalian) Ltd. 38 Ying Ri Road, Ying Cheng Zi Industrial Zone, Gan Jing Zi District, Dalian 116036 China
<b>DESCRIPTION</b>	Flexible Hoses of Non-Metallic Material with Permanently Fitted Couplings Designations: Driller D2B
<b>TYPE</b>	Driller Hose
<b>APPLICATION</b>	For use on ships and offshore installations classed with Lloyd's Register, as short lengths in systems of hydraulic oil and air
<b>DESIGN CODE STANDARD</b>	Part 5, Chapter 12 of Lloyd's Register's Rules and Regulations for the Classification of Ships (July, 2013) Part 5, Chapter 10 of Lloyd's Register's Rules and Regulations for the Classification of Mobile Offshore Units (September 1996 plus Notices Nos. 1, 2, 3, 4, 5 & 6 as applicable) Fire Resistant Testing according to ISO 15540/15541
<b>RATINGS</b>	Sizes: DN 38 to DN 51 Maximum Working Pressure: 90 to 100 bar (see below) Service Temperature: -40°C to +135°C (see below) Coupling Material: Carbon Steel AISI/SAE 12L14 (Standard), Stainless Steel (Option) Electroplated Fe/Zn12c acc. to AS1789
<b>Certificate No.</b>	13/10071
<b>Issue Date</b>	01 October 2013
<b>Expiry Date</b>	30 September 2018
<b>Sheet</b>	1 of 2



N. Nagamune  
Yokohama Technical Support Office  
Lloyd's Register Group Limited

*Lloyd's Register Group Limited, registered office:  
71 Fenchurch Street, London EC3M 4BS*

**OTHER CONDITIONS**

The hoses may be used for the following working conditions

DRILLER D2B	DN (mm)	Max. Pressure (bar)
D224B	38	100
D232B	51	90
Temperature Range: Air: -40°C to +121°C Oil: -40°C to +135°C		

Where synthetic rubber hoses are used for oil fuel supply to burners, the hoses are to have external wire braid protection in addition to the integral wire braid.

Carbon steel couplings are to be normalised for temperatures below -10°C.

In all cases the hoses are to be installed in accordance with the manufacturer's instructions and tested to the satisfaction of the attending surveyor.

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate."*

*The Design Appraisal Document No. 13/10071 and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

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